

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TENNESSEE  
AT GREENEVILLE**

**LINDA DORSEY, DOYLE DORSEY,  
JO LEE FERGUSON, KATHRYN  
MCKINNEY, RAEGAN MUSE, and  
ROBERT DAVID MUSE, JR.,**

**Plaintiffs,**

**v.**

**EASTMAN CHEMICAL COMPANY,**

**Defendant.**

**Civil Action No.**

**JURY TRIAL DEMANDED**

**COMPLAINT**

Plaintiffs Linda Dorsey, Doyle Dorsey, Jo Lee Ferguson, Kathryn McKinney, Raegan Muse, and Robert David Muse, Jr. (collectively “Plaintiffs”) file this Complaint against defendant Eastman Chemical Company (“Eastman” or “Defendant”) and allege as follows:

**INTRODUCTION**

1. Eastman operates an industrial ethylene oxide production plant in Longview, Texas (the “Industrial Plant”). As part of its production process, Defendant has emitted hundreds of thousands of pounds of ethylene oxide (“EtO”), an odorless, colorless, and highly carcinogenic gas, into the air.

2. Plaintiffs are innocent bystanders who live and/or lived adjacent to the Industrial Plant for years and were regularly exposed to EtO in the air they breathed each day.

3. Although EtO has been classified as a human carcinogen for decades,

Eastman disregarded EtO's harmful properties and continued, and continues, to release EtO into the surrounding community—entirely unbeknownst to area residents and workers.

4. Eastman's self-reported EtO emissions from the Industrial Plant show Eastman has emitted high levels of EtO for decades. While most of these EtO emissions are from controlled sources, approximately half of these emissions are "fugitive emissions" that have escaped, and continue to escape, the Industrial Plant.

5. As a result, and unbeknownst to them, individuals living and working near the Industrial Plant face some of the highest cancer risks in the United States. These individuals, including Plaintiffs, have been unknowingly inhaling EtO on a routine and continuous basis for decades.

#### **PARTIES**

6. Plaintiff Linda Dorsey is a natural person and a resident and citizen of the State of Texas.

7. Plaintiff Doyle Dorsey is a natural person and a resident and citizen of the State of Texas.

8. Plaintiffs Linda and Doyle Dorsey have been married for 24 years.

9. Plaintiff Jo Lee Ferguson is a natural person and a resident and citizen of the State of Texas.

11. Plaintiff Kathryn McKinney is a natural person and a resident and citizen of the State of Texas.

12. Plaintiff Raegan Muse is a natural person and a resident and citizen of the

State of Georgia.

13. Plaintiff Robert David Muse, Jr. is a natural person and citizen of the State of Georgia.

14. Plaintiffs Raegan Muse and Robert David Muse Jr. have been married for 25 years.

15. Defendant Eastman Chemical Company is a publicly traded corporation (NYSE: EMN) organized and existing under the laws of Delaware with its principal place of business at 200 South Wilcox Drive, Kingsport, Tennessee, 37660.

#### **JURISDICTION AND VENUE**

16. This Court has subject matter jurisdiction over this action under 28 U.S.C. § 1332(a) because (i) the parties are citizens of different states and (ii) the amount in controversy exceeds \$75,000.

17. This Court has personal jurisdiction over Defendant because it conducts significant business in this District, it expected its acts to have consequences within the State of Tennessee, and it derived substantial revenue from interstate commerce. Defendant purposefully availed itself of the privilege of conducting activities within the State of Tennessee, thus invoking the benefits and protections of its laws.

18. Venue is proper in this District because Defendant's principal place of business is located in this District.

#### **FACTUAL ALLEGATIONS**

##### **I. The Ethylene Oxide Production Process and Resulting Emissions of Carcinogenic Ethylene Oxide.**

19. EtO is a colorless, odorless, and flammable gas at room temperature that is

produced and used in large volumes for industrial purposes.<sup>1</sup>

20. Gaseous EtO is used to make a range of products, such as antifreeze, plastics, detergents, and adhesives, as well as to sterilize medical devices.

21. Ethylene oxide was first manufactured by Charles-Adolphe Wurtz in 1859 by utilizing a potassium hydroxide solution to eliminate hydrochloric acid from ethylene chlorohydrin.<sup>2</sup>

22. This discovery led to the development of the chlorohydrin process and industrial EtO production in 1914.<sup>3</sup>

23. The chlorohydrin process was found to be inefficient because it resulted in the loss of other valuable components, such as chlorine.<sup>4</sup>

24. Because of its inefficiency, the chlorohydrin process was largely phased out after Theodore Lefort's discovery of direct catalytic oxidation of ethylene in 1931. EtO could then be commercially produced by direct oxidation of ethylene with air.<sup>5</sup>

25. In 1958, the EtO production process was further improved when the air used in direct oxidation was replaced with oxygen, elevated the temperature to 200-

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<sup>1</sup> <https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/ethylene-oxide>.

<sup>2</sup> See American Chemistry Council, *Ethylene Oxide Product Stewardship Guidance Manual*. Available online: <https://www.lyondellbasell.com/globalassets/documents/chemicals-technical-literature/ethylene-oxide-manual.pdf>.

<sup>3</sup> *Id.*

<sup>4</sup> U.S. Environmental Protection Agency, *Locating and Estimating Sources of Ethylene Oxide*. Available online: [https://www.epa.gov/sites/default/files/2020-11/documents/ethylene\\_oxide.pdf](https://www.epa.gov/sites/default/files/2020-11/documents/ethylene_oxide.pdf).

<sup>5</sup> American Chemistry Council, *Ethylene Oxide Product Stewardship Guidance Manual*.

300°C or 390-570°F, and increased the pressure.<sup>6</sup> After 1975 this improved process almost completely replaced previous production methods.<sup>7</sup>

26. Since approximately 1975, the basic EtO production process, as described by the United States Environmental Protection Agency (“EPA”), and that, the Industrial Plant uses, begins by combining an ethylene stream and compressed air or oxygen stream with a recycled ethylene stream. All three streams are combined as they enter one of the primary reactors and the reaction takes place over a silver catalyst that is packed in tubes.<sup>8</sup>

27. The resulting reaction is cooled, compressed, and passed through an absorber. While passing through the absorber into cold water, EtO and other components, such as carbon dioxide and hydrocarbons, dissolve into the water.

28. Any gas that is unabsorbed either becomes the recycled ethylene stream utilized in the first step of the production process or it is purged to prevent accumulation of inert gases.

29. The purged stream enters a secondary purge reactor to recover the ethylene content, then flows into a secondary purge absorber.

30. Finally, remaining EtO is vented from the final absorber to the stack.

31. Throughout the Industrial Plant’s EtO production process, there are multiple sources of EtO emissions.

32. First, it is impossible for the Industrial Plant to extract all the EtO during

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<sup>6</sup> Weissermel K; Arpe H-J, *Industrial Organic Chemistry* (4th ed.) (2003).

<sup>7</sup> *Id.*

<sup>8</sup> *See generally supra* at n. 4.

purging and absorbing because EtO is needed as part of production. After the EtO has been through all the purge and absorber steps, EtO emissions are vented through the absorber to the stack. These emissions are known as “stack emissions.”

33. Stack EtO emissions are released into the air surrounding the Industrial Plant and have a detrimental impact on the health of workers and innocent bystanders who live, work, and attend school in the communities surrounding the Industrial Plant.

34. Second, as part of the regular use of EtO production equipment, EtO leaks from seals, compressors, valves, and pressure relief devices, among other sources, at the Industrial Plant. These are referred to as “fugitive emissions.”

35. Like stack emissions, when fugitive emissions escape into the air from the Industrial Plant, they cause grave health concerns for workers and innocent bystanders who live, work, and attend school in the communities surrounding the Industrial Plant.

## **II. Ethylene Oxide Drifts After It Is Emitted into the Air.**

36. EtO is a gas at room temperature. When EtO is released into the air, it will exist solely as a gas in the atmosphere until it is broken down.<sup>9</sup>

37. EtO can have a half-life of approximately 69 days during summer months

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<sup>9</sup> See National Library of Medicine, National Center for Biotechnology Information. Compound Summary-Ethylene Oxide. Available online: <https://pubchem.ncbi.nlm.nih.gov/compound/6354#section=ICSC-Environmental-Data>.

and approximately 149 days during winter months.<sup>10</sup> This means half of the EtO emitted from the Industrial Plant will still be in the air for months. The amount of EtO in the air accumulates as EtO is continuously emitted from the Industrial Plant.

38. Once the Industrial Plant releases EtO into the air, it can be moved around by the wind until it ultimately breaks down.

39. EtO that is deposited on soil may later volatilize, or pick up and move, back into the air. The half-life of EtO from wet soil may range from six hours to four days. EtO can also remain on water for many days.<sup>11</sup>

40. Further, because of EtO's molecular weight, it can collect, or accumulate, around ground level. When there are calm meteorological conditions, temperature inversions trap EtO forcing it to "hover" near the ground rather than being disbursed further from the Industrial Plant by the wind.<sup>12</sup> This accumulated EtO can then be picked up by the wind and further dispersed into the air.

41. The National Air Toxics Assessment has conducted ambient air monitoring of EtO around facilities that use and emit EtO, primarily for sterilization, and around

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<sup>10</sup> Szwiec, et al., *Levels of Ethylene Oxide Biomarker in an Exposed Residential Community*, Intl. J. Environ. Res. Public Health 2020, 17, 846.

<sup>11</sup> *Id.*

<sup>12</sup> See *Letter Health Consultation: Evaluation of Potential Health Impacts from Ethylene Oxide Emissions*. Agency for Toxic Substances and Disease Registry. Available online: [https://www.atsdr.cdc.gov/HAC/pha/sterigenic/Sterigenics\\_International\\_Inc-508.pdf](https://www.atsdr.cdc.gov/HAC/pha/sterigenic/Sterigenics_International_Inc-508.pdf) (reporting on air monitoring next to Illinois medical sterilization facility and finding 12-hour samples had higher levels of EtO than single "grab" samples, which was likely attributable to 24-hour run by facility allowing EtO to accumulate near the ground and be impacted by a temperature inversion). Upon information and belief, the Industrial Plant is also a 24-hour operation.

locations without facilities.<sup>13</sup> These studies show that EtO levels are higher around those EtO facilities and EtO moves through the air away from the EtO facilities after it is emitted.

42. The EPA has also conducted air monitoring and modeling for eight locations near specific sources of EtO emissions. Those studies found higher levels of EtO away from the facility compared to expected background levels of EtO.<sup>14</sup>

43. For example, in 2018, the EPA measured air concentrations of EtO around two EtO sterilization facilities in Illinois.<sup>15</sup> That study found EtO miles away from the facilities.

44. A study of blood samples from residents living around the same Illinois facilities found the presence of EtO in increasing amounts the closer people lived near those facilities.<sup>16</sup>

45. In 2024, Johns Hopkins University tested EtO concentrations around industrial EtO facilities in Louisiana. Researchers found EtO concentrations were over a thousand times higher than the accepted risk for lifetime exposure. Even more alarming, when comparing the concentrations to the EPA's estimates, Johns Hopkins

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<sup>13</sup> National Toxicology Program. Ethylene Oxide, Report on Carcinogens, Fifteenth Ed., Dec. 21, 2021, available at: <https://ntp.niehs.nih.gov/ntp/roc/content/profiles/ethyleneoxide.pdf>.

<sup>14</sup> *Id.*

<sup>15</sup> *Letter Health Consultation: Evaluation of Potential Health Impacts from Ethylene Oxide Emissions*. Agency for Toxic Substances and Disease Registry. Available online:

[https://www.atsdr.cdc.gov/HAC/pha/sterigenic/Sterigenics\\_International\\_Inc-508.pdf](https://www.atsdr.cdc.gov/HAC/pha/sterigenic/Sterigenics_International_Inc-508.pdf).

<sup>16</sup> Szwiec, et al., *Levels of Ethylene Oxide Biomarker in an Exposed Residential Community*, Intl. J. Environ. Res. Public Health 2020, 17, 846.



found that the true concentrations were even higher than what the EPA had measured.<sup>17</sup> Moreover, this study showed that EtO formed “plumes” miles away from the emission source.

### **III. Health Effects of Ethylene Oxide Exposure.**

46. For nearly half a century, global health organizations have identified adverse health effects from EtO exposure, including various cancers, such as blood, lymphoid, and breast cancers.

47. In 1977, the National Institute of Occupational Safety and Health (“NIOSH”) raised concerns that EtO may be a carcinogen and concluded that occupational exposure to EtO may increase the frequency of genetic mutations in humans.<sup>18</sup>

48. In 1981, NIOSH released a subsequent report and recommended that EtO be regarded as a potential occupational carcinogen.<sup>19</sup> NIOSH based its recommendation on additional evidence of EtO’s carcinogenic, mutagenic, and reproductive hazards and studies showing an increased cancer risk.

49. In 1985, the United States Department of Health and Human Services published the Fourth Annual Report on Carcinogens and classified EtO as reasonably

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<sup>17</sup> Robinson, et al., *Ethylene Oxide in Southeastern Louisiana’s Petrochemical Corridor: High Spatial Resolution Mobile Monitoring during HAP-MAP*, Environ. Sci. & Technol. 2024, 58, 25, 11084-11095.

<sup>18</sup> *Special Occupational Hazard Review with Control Recommendations: Use of Ethylene Oxide as a Sterilant in Medical Facilities*, NIOSH, August 1977, <https://www.cdc.gov/niosh/docs/77-200/>.

<sup>19</sup> *Ethylene Oxide (EtO): Evidence of Carcinogenicity*, NIOSH, May 1981, <https://www.cdc.gov/niosh/docs/81-130/>.

anticipated to be a human carcinogen.<sup>20</sup>

50. The 1990 revision of the United States Clean Air Act (“CAA”) included EtO as a Hazardous Air Pollutant (“HAP”) in Section 112(d).

51. The International Agency for Research on Cancer (“IARC”) is an agency that studies the risks of cancer associated with various chemicals for the World Health Organization.<sup>21</sup>

52. IARC employs a stratified system to rank the risk of cancer associated with a given chemical. This system breaks the risk groups into different tiers:

**Group 1** (carcinogenic to humans);

**Group 2A** (probably carcinogenic to humans);

**Group 2B** (possibly carcinogenic to humans);

**Group 3** (not classifiable as to its carcinogenicity to humans); and

**Group 4** (probably not carcinogenic to humans).<sup>22</sup>

53. Since at least 1994, IARC has considered EtO in the highest risk category: Group 1 (carcinogenic to humans).<sup>23</sup>

54. In 2000, the United States Department of Health and Human Service’s

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<sup>20</sup> Fourth Annual Report on Carcinogens, Public Health Service (1985), Report No. NIOSH00171634.

<sup>21</sup> IARC’s Mission: Cancer Research for Cancer Prevention, International Agency for Research on Cancer, <https://www.iarc.who.int/about-iarc-mission/>.

<sup>22</sup> Agents Classified by the IARC Monographs, Volumes 1-132, International Agency for Research on Cancer, <https://monographs.iarc.who.int/agents-classified-by-the-iarc/>.

<sup>23</sup> *Id.*

National Toxicology Program listed EtO as a known human carcinogen.<sup>24</sup>

55. In 2004, NIOSH published a large epidemiological study that analyzed over 18,000 employees who worked with EtO at facilities that sterilized medical equipment and spices.<sup>25</sup> That study found a link between EtO exposure and increased cases of cancer, including breast cancer among women and lymphoid cancers in males (i.e. myeloma, lymphocytic leukemia, and non-Hodgkin lymphoma).

56. In December 2016, as part of its study of bystanders who live near facilities that use and emit EtO, the EPA reclassified ethylene oxide from a “probable cancer-causing” agent to a “known carcinogen,” and found that it was 30 times more carcinogenic than previously considered.

57. The EPA has determined that EtO is carcinogenic to humans by the inhalation route of exposure.<sup>26</sup>

58. Human exposure to EtO through inhalation significantly increases the risk of developing various forms of cancers, including breast cancer and cancers of the blood, including non-Hodgkin lymphoma, myeloma, and lymphocytic leukemia, and

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<sup>24</sup> See, e.g., National Toxicology Program. Ethylene Oxide, Report on Carcinogens, Fourteenth Ed., Nov. 3, 2016, available at <https://ntp.niehs.nih.gov/ntp/roc/content/profiles/ethyleneoxide.pdf>.

<sup>25</sup> Worker Health Study Summaries – Ethylene Oxide, NIOSH, April 2004, <https://www.cdc.gov/niosh/pgms/worknotify/ethyleneoxide.html>.

<sup>26</sup> Leighton, et al., *Ethylene Oxide (EtO). Draft Human Health and Ecological Risk Assessment in Support of Registration Review*, EPA, Nov. 3, 2020, <https://www.epa.gov/sites/default/files/2020-11/documents/d458706-eto-final-dra-nov-3-2020.pdf>.

lymphoid.<sup>27</sup>

59. In 2019, the Illinois Department of Public Health (“IDPH”) assessed cancer rates in the population surrounding the Sterigenics medical sterilization facility in Willowbrook, Illinois.<sup>28</sup> The Sterigenics facility had been using and emitting EtO since 1984. The findings reaffirmed decades of studies on EtO exposure. The IDPH found elevated cases of lymphohematopoietic, breast, and other cancers, including prostate, pancreatic, ovarian, and bladder cancers. That study further found an increase in certain pediatric cancers.

60. Also in 2019, after the EPA found that the largest sterilization facility in Michigan imposed an additional cancer risk greater than 1 in 1,000 thousand in nearby neighborhoods, the Michigan Department of Environmental Quality (now referred to as the Department of Environment, Great Lakes, and Energy) conducted an air quality modeling study to study the ambient EtO impacts of the sterilization facility.<sup>29</sup> The study found that the estimated peak 24 hour exposure to EtO caused by the sterilization facility corresponded to an additional cancer risk of approximately

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<sup>27</sup> *Frequent Questions about Ethylene Oxide*, Environmental Protection Agency, <https://www.epa.gov/hazardous-air-pollutants-ethylene-oxide/frequent-questions-about-ethylene-oxide-eto>.

<sup>28</sup> Cancer Incidence Assessment near Sterigenics in Willowbrook, IL, 1995-2015, Illinois Department of Public Health, Division of Epidemiological Studies (March 29, 2019), <https://dph.illinois.gov/content/dam/soi/en/web/idph/files/publications/sterigenicswillowbrookcancer-investigation-final-0.pdf>. That facility emitted between 17,000 and 33,000 pounds of EtO annually before 1999 and about 5,000 pounds annually since 1999.

<sup>29</sup> Olaguer, et al, *Ethylene Oxide Exposure Attribution and Emissions Quantification Based on Ambient Air Measurements near a Sterilization Facility*, Int. J. Environ. Res. Public Health, 17(1), 42, <https://doi.org/10.3390/ijerph17010042>.

one in one hundred.<sup>30</sup>

#### **IV. Regulation of Ethylene Oxide Production Facilities.**

61. The Clean Air Act, 42 U.S.C. §§ 7401 *et seq.*, is the primary mechanism through which the federal government regulates air emissions from industrial facilities that emit hazardous air pollutants in the United States. The CAA requires the EPA to identify sources of and set national emission standards for a specific list of nearly 200 hazardous air pollutants.<sup>31</sup>

62. The emission standards, known as National Emission Standards for Hazardous Air Pollutants (“NESHAP”), apply to facilities such as the Industrial Plant and are enforceable by the EPA.<sup>32</sup>

63. In 1994, NESHAP established to a Maximum Achievable Control Technology (“MACT”) standard for EtO, as well as a subsequent Risk and Technology Review to determine whether additional controls at regulated facilities were necessary to reduce unacceptable residual risk.

64. The CAA also created a nationally uniform system of permits, known as “Title V permits,” for major industrial sources.<sup>33</sup> The EPA sets the substantive requirements for the Title V permitting program. It also has the power to authorize individual states to administer the permitting program on the EPA’s behalf.<sup>34</sup>

65. In 1972 the EPA approved Texas’ Air Control Board of the Texas

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<sup>30</sup> *Id.*

<sup>31</sup> 42 U.S.C. § 7412.

<sup>32</sup> 40 C.F.R. § 63.368.

<sup>33</sup> 40 C.F.R. § 70.1.

<sup>34</sup> 40 C.F.R. §§ 70 *et seq.*

Commission on Environmental Quality (“TCEQ”) to be responsible for permitting, including for the Industrial Plant.<sup>35</sup>

66. The Industrial Plant is subject to the New Source Performance Standards (“NSPS”) for the Synthetic Organic Chemical Manufacturing Industry (“SOCMI”) and National Emission Standards for Hazardous Air Pollutants (“NESHAP”) for SOCMI and Group I & II Polymers and Resins (P&R I and P&R II respectively) Industry, 40 C.F.R. Part 60 and 63. This requires the Industrial Plant to reduce EtO emissions to the atmosphere from each vent to a maximum concentration of 1 part per million by volume (“ppmv”) or by at least 99%, or to less than 5 pounds per year for all combined process vents per chemical manufacturing process unit (“CMPU”).

67. In 2016, the EPA updated the Integrated Risk Information System (“IRIS”) inhalation unit risk estimate (“URE”) for EtO. The EPA identified unacceptable cancer risk driven by EtO emissions from Hazardous Organic NESHAP (“HON”) processes.

68. On or about May 16, 2024, the EPA announced final amendments to the EtO emission standards proscribed in the CAA.<sup>36</sup>

69. The amended rule intends to address the unacceptable risk and achieve a satisfactory margin of safety to protect the communities closest to production

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<sup>35</sup> Texas Commission on Environmental Quality, *History of TCEQ and Its Predecessor Agencies*, <https://www.tceq.texas.gov/agency/organization/tceqhistory.html>.

<sup>36</sup> EPA, *New Source Performance Standards for the Synthetic Organic Chemical Manufacturing Industry and National Emission Standards for Hazardous Air Pollutants for the Synthetic Organic Chemical Manufacturing Industry and Group I & II Polymers and Resins Industry*, <https://www.govinfo.gov/content/pkg/FR-2024-05-16/pdf/2024-07002.pdf>.

facilities nationwide.<sup>37</sup>

## V. Eastman's Industrial Plant and Ethylene Oxide Emissions.

70. Eastman opened its 600-acre Industrial Plant in 1952.<sup>38</sup> The Industrial Plant is located at 300 Kodak Boulevard, Longview, Texas 75605.

71. The Industrial Plant currently operates two EtO production lines, Ethylene Oxide Plant 1 and Ethylene Oxide Plant 2.<sup>39</sup>

72. The following chart summarizes the amount of EtO Eastman told the EPA it released into the air surrounding the Industrial Plant.

Year	Fugitive Air (lbs)	Stack Air (lbs)
1987	57000	7800
1988	52000	7800
1989	46000	7800
1990	19000	7800
1991	10000	6900
1992	1400	8200
1993	670	6100
1994	530	5500
1995	520	5500
1996	1800	3900
1997	650	4000
1998	580	3400
1999	420	3500
2000	420	3300
2001	550	3800
2002	8200	20000

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<sup>37</sup> *Id.*

<sup>38</sup> *Historical investment: Eastman chooses Longview for new manufacturing facility*, Longview News Journal, May 9, 2024, at [https://www.news-journal.com/news/local/historical-investment-eastman-chooses-longview-for-new-manufacturing-facility/article\\_c803c1d6-eab6-11ee-83b0-7bc67b3c2121.html](https://www.news-journal.com/news/local/historical-investment-eastman-chooses-longview-for-new-manufacturing-facility/article_c803c1d6-eab6-11ee-83b0-7bc67b3c2121.html).

<sup>39</sup> EPA, *Ethylene Oxide: Technical Review Report for Eastman Chemical Texas Operations Longview, TX*, July 28, 2021, at <https://www.epa.gov/caa-permitting/site-specific-information-ethylene-oxide-eto-eastman-chemical-texas-operations>.

2003	6600	19000
2004	7700	15000
2005	3600	14000
2006	3400	13000
2007	1800	16000
2008	2200	18000
2009	2800	15000
2010	2486	10675
2011	2607	10613
2012	3660	10963
2013	2022	10375
2014	9963	4508
2015	3440	4476
2016	3480	5054
2017	2804	6112
2018	2210	4006
2019	1768	3558
2020	1436	2668
2021	2354	3865
2022	4516	2772

73. From 1987 to 2022, the Industrial Plant self-reported that it released more than 565,000 pounds of EtO into the Longview community.

74. However, Eastman's self-reported emissions do not tell the whole story. According to the Texas Commission on Environmental Quality's database, there have been numerous emission events in which the Industrial Plant released unauthorized EtO into the surrounding community. For example:

- a. On December 10, 2003, Eastman reported pump rupture that led to an "estimated" 300 pounds of EtO emitted;
- b. On October 4, 2006, Eastman reported a leak that led to 160 pounds of EtO emitted, again, based on "[e]ngineering best estimates";
- c. On May 29, 2009, Eastman reported it had a power outage resulting in more than 350 pounds of EtO;



- d. On December 16, 2010, Eastman reported it released 387 pounds of EtO due to a bleed valve leak;
- e. On May 20, 2011, Eastman reported that a valve was “discovered to be open without a plug” and that it was “unsure” if it actually emitted, but was reporting that it emitted almost 17,000 pounds of EtO;
- f. On June 16, 2011, Eastman reported that it released approximately 180 pounds of EtO as part of a leak;
- g. On February 16, 2012, Eastman reported that it released approximately 120 pounds of EtO because of a leak;
- h. On September 22, 2014, Eastman reported that it released approximately 6,400 pounds of EtO because of a “pipeline flange fail[ure];”
- i. On October 16, 2014, Eastman reported that it released 1,712 pounds of EtO because of a power failure;
- j. On May 20, 2016, Eastman reported that it released more than 1,300 pounds of EtO because of a power failure;
- k. On March 27, 2017, Eastman reported that it emitted 829 pounds of EtO because of a “control valve failure;”
- l. On January 19, 2018, Eastman reported that it emitted more than 1,000 pounds of EtO because of leaking valves; and
- m. On November 11, 2018, Eastman reported that it emitted more than 1,000 pounds of EtO because of a “valve misalignment.”

75. Through just these few examples of reported emission events, Eastman has released more than 30,000 pounds of EtO in excess of its otherwise reported emissions.

76. Eastman’s Industrial Plant also entered into an Agreed Order on April 26, 2023, with the Texas Commission on Environmental Quality because of its “unauthorized emissions” in violation of Texas statutes.

77. Moreover, as the below screenshot from the EPA’s compliance database shows, in the last five years, the Industrial Plant has had twelve fiscal quarters with “Significant Violations” of the Clean Air Act and its current compliance status with the EPA is listed as “High Priority Violation.”

#### Enforcement and Compliance Summary

Statute ↓	Compliance Monitoring Activities (5 years) ↓	Date of Last Compliance Monitoring Activity ↓	Compliance Status ↓	Qtrs with NC (of 12) ↓	Qtrs with Significant Violation ↓	Informal Enforcement Actions (5 years) ↓	Formal Enforcement Actions (5 years) ↓	Penalties from Formal Enforcement Actions (5 years) ↓	EPA Cases (5 years) ↓	Penalties from EPA Cases (5 years) ↓
CAA	10 ①	08/21/2023	High Priority Violation	12	12	7	6	\$458,347	--	--

#### Regulatory Information

**Clean Air Act (CAA):** Operating Major (TX0000004820300059), Operating Major (TX0000004820300344), Operating Major (TX0000004820300019)  
**Clean Water Act (CWA):** Major, Permit Effective (TX0000949)  
**Resource Conservation and Recovery Act (RCRA):** Active VSQG, (TXR000036301), Active LQG, Operating TSD, (TXD007330202)  
**Safe Drinking Water Act (SDWA):** OWNER: Private, PRIMARY SERVICE AREA DESCRIPTION: Industrial/Agricultural, SOURCE: Surface water purchased, TYPE: Non-Transient non-community system Permit Active (TX1020092)

#### Other Regulatory Reports

**Air Emissions Inventory (EIS):** 7908711, 4941511  
**Greenhouse Gas Emissions (eGGRT):** [1007438](#)  
**Toxic Releases (TRI):** 75607TXSSTOFFHI  
**Compliance and Emissions Data Reporting Interface (CEDRI):** [CEDRI131781](#)

## VI. The National Air Toxics Assessment Confirms Eastman Has Created Excess Cancer Risk Surrounding the Industrial Plant.

78. The National Air Toxics Assessment (“NATA”) is part of the EPA’s analysis of substances regulated under the CAA. It provides an estimate of cancer risk from breathing air toxins.

79. In 2018, the EPA released the results of its analysis based on facilities’ self-reported 2014 emissions data. That analysis revealed an increased risk of cancer around the Industrial Plant because of Eastman’s EtO emissions. The EPA reported that the Industrial Plant provided an excess cancer risk of 300 per 1 million people.

80. In calculating this risk, the EPA relied on Eastman’s self-reported emissions from 2014 of 14,471 pounds. This amount was based on the emissions submitted for use in the EPA’s Toxic Release Inventory (“TRI”) and woefully understated the actual risk from Eastman’s emissions. First, 14,471 pounds per year is among the lowest amounts of Eastman’s self-reported emissions. In 1987, for example, Eastman reported it emitted more than **4 times** that amount, or 64,800

pounds of EtO. Thus, the EPA's analysis significantly understated the risk from EtO emissions. This bears repeating, even when Eastman minimally reported 14,471 pounds of EtO emitted from the Industrial Plant, the EPA found an increased risk of cancer. That risk was more than four times higher in preceding years.

81. In November 2021, Eastman recognized the EPA's analysis established an increased cancer risk because of its EtO emissions, but stated the increased cancer risk in the vicinity of the Industrial Plant was not entirely due to its industrial activity.<sup>40</sup>

82. Defendant then claimed it has been monitoring its employees to ensure their safety for the last 50 years.<sup>41</sup> Thus, for at least 50 years, Eastman has known of potential health risks due to its EtO activities but failed to protect the surrounding communities.<sup>42</sup>

83. Rather, when faced with this data, Eastman submitted "amended" emission data to the EPA which now, it contended, showed a 78% risk reduction.<sup>43</sup> This purported risk reduction was created by Eastman's "refinements to the engineering estimates of the emissions. They are not due to physical or operational changes at the Eastman facility."

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<sup>40</sup> *Longview Has 'hot spot' for Cancer Causing Air, According to ProPublica Report*, KLTV, November 18, 2021, <https://www.kltv.com/2021/11/19/longview-has-hot-spot-cancer-causing-air-according-propublica-report/>.

<sup>41</sup> *Id.*

<sup>42</sup> <https://www.epa.gov/system/files/documents/2021-07/technical-assessment-report-eastman-chemicals-jun-24-21-rev-jul-28-21.pdf>.

<sup>43</sup> *See* ETO Technical Assessment Report for Eastman (June 24, 2021 rev July 28, 2012), available at <https://www.epa.gov/caa-permitting/site-specific-information-ethylene-oxide-eto-eastman-chemical-texas-operations>.

84. Moreover, when questioned in 2021, Defendant's hired consultant claimed "[e]ven EPA's conservative assessment indicates that there's not even a single excess cancer risk per year" and that the dangers of Eastman's EtO emissions are "just part of the dangers one encounters simply from being alive."<sup>44</sup>

## **VII. Plaintiffs' Ethylene Oxide Exposure.**

### ***Linda Dorsey***

85. For over three decades, Plaintiff Linda Dorsey lived near the Industrial Plant.

86. Specifically, in approximately 1973, Mrs. Dorsey moved to Longview, Texas.

87. From approximately 1973 to 2005, Mrs. Dorsey lived in various homes in Longview, approximately five to eight miles from the Industrial Plant. During that time,<sup>45</sup> Eastman reported it emitted over 370,000 pounds of cancer causing EtO into the air surrounding the Industrial Plant.

88. As a result of exposure to the EtO Eastman emitted, Mrs. Dorsey was diagnosed with breast cancer in 2017.

### ***Jo Lee Ferguson***

89. For over 30 years, Plaintiff Jo Lee Ferguson lived near the Industrial Plant.

90. Specifically, in 1974, Mrs. Ferguson was born in Longview, Texas.

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<sup>44</sup> See <https://theintercept.com/2021/10/13/epa-ethylene-oxide-misinformation/>.

<sup>45</sup> As discussion *infra*, Defendant's self-reported EtO emissions are publicly available from 1987 to 2022. Thus, Plaintiffs' exposures described herein are limited to the post-1987 data. Plaintiffs who lived near the Industrial Plant prior to 1987 were exposed to even more EtO.

91. From approximately 1976 to 1994, Mrs. Ferguson lived approximately nine miles from the Industrial Plant. From approximately 2006 through the present, Mrs. Ferguson has lived approximately six miles from the Industrial Plant. During those periods and prior to her diagnosis, Eastman reported that it emitted more than 400,000 pounds of cancer causing EtO into the air surrounding the Industrial Plant.

92. As a result of exposure to the EtO Eastman emitted, Mrs. Ferguson was first diagnosed with breast cancer in 2017. Mrs. Ferguson's cancer returned as stage 4, metastatic, inoperable breast cancer in 2020.

***Kathryn McKinney***

93. For approximately ten years, Plaintiff Kathryn McKinney lived near the Industrial Plant.

94. Specifically, in 2008, Mrs. McKinney moved to Longview, Texas.

95. From approximately 2008 to 2018, Mrs. McKinney lived in various locations, located approximately six to thirteen miles from the Industrial Plant. During that time, Eastman reported it emitted over 137,000 pounds of cancer causing EtO into the air surrounding the Industrial Plant.

96. As a result of exposure to the EtO Eastman emitted, Mrs. McKinney was diagnosed with breast cancer in 2018.

***Raegan Muse***

97. For more than two decades, Plaintiff Raegan Muse lived near the Industrial Plant.

98. Specifically, Mrs. Muse was born in Longview, Texas.

99. From approximately 1974 to 1997, Mrs. Muse lived approximately eight miles from the Industrial Plant. During that time, Defendant reported it emitted over 260,000 pounds of cancer causing EtO into the air surrounding the Industrial Plant.

100. As a result of exposure to the EtO Eastman emitted, Mrs. Muse was diagnosed with breast cancer in 2016 and had a recurrence in 2022.

101. Plaintiffs consistently, and without any knowledge, inhaled toxic levels of EtO in and around their homes, their places of work, and in Longview generally.

102. At the time of their diagnoses, Plaintiffs were neither on notice nor aware that they had been inhaling toxic levels of EtO for years.

#### **STATUTE OF LIMITATIONS AND TOLLING**

103. The statute of limitations governing Plaintiffs' claims against Eastman were tolled pursuant to the discovery rule.

104. Plaintiffs had no knowledge of Eastman's EtO emissions and could not have discovered that Plaintiffs' cancer diagnoses were linked to their EtO exposure through reasonable due diligence prior to filing this Complaint because EtO is a colorless and odorless gas.

105. Therefore, Plaintiffs would have no reason to suspect that they were being exposed to a carcinogenic gas for decades.

106. Further, because Plaintiffs did not know of their exposure to EtO, Plaintiffs would have had no reason to initially believe their cancer diagnoses were due to EtO exposure.

107. Accordingly, Plaintiffs assert that the applicable statute of limitations on Plaintiffs' claims have been tolled.

**CAUSES OF ACTION**

**Count I: Negligence**

*(On behalf of Plaintiffs Linda Dorsey, Jo Lee Ferguson,  
Kathryn McKinney, and Raegan Muse)*

108. Plaintiffs reallege paragraphs 1-107 as if fully set forth herein.

109. Eastman had a duty to exercise reasonable care in the operation of the Industrial Plant, including testing of EtO emissions, mitigation of EtO emissions, manufacture and use of EtO, and emission of EtO, including a duty to ensure that its manufacture of EtO would not cause those exposed to it to suffer unreasonably dangerous side effects.

110. Eastman failed to exercise reasonable care in the testing of EtO emissions, mitigation of EtO emissions, manufacture and use of EtO, and emissions of EtO in that Eastman knew or should have known that its EtO emissions would result in exposures to EtO by innocent bystanders, resulting in a high risk of unreasonably dangerous side effects, including, but not limited to, cancer.

111. Eastman's negligence included, but was not limited to, the following acts and/or omissions:

- a. Emitting EtO into the air from the Industrial Plant;
- b. Emitting dangerous and/or excessive amounts of EtO from the Industrial Plant;
- c. Failing to exercise reasonable care in the emission of EtO from the Industrial Plant;

- d. Failing to adopt, implement, and/or enforce reasonable and sufficient measures to mitigate and/or reduce emissions of EtO from the Industrial Plant to potentially non-harmful levels;
- e. Failing to adequately track, record, and/or monitor the amounts or levels of emissions of EtO from the Industrial Plant;
- f. Failing to adequately track, record, and/or monitor the amount of EtO present in the air surrounding the Industrial Plant;
- g. Failing to adequately, accurately, and thoroughly report the levels of EtO being emitted from the Industrial Plant;
- h. Failing to report fugitive emissions of EtO;
- i. Failing to select and utilize safer, alternative methods to produce EtO at the Industrial Plant;
- j. Failing to investigate or study safer, alternative methods to produce EtO at the Industrial Plant;
- k. Concealing from the public the nature and extent of EtO emissions from the Industrial Plant;
- l. Failing to warn Plaintiffs and others who live and work in the surrounding community that they were being exposed to EtO; and
- m. Failing to provide adequate cautions and warnings to protect the health of Plaintiffs and those who would reasonably and foreseeably be exposed to EtO.

112. Eastman knew or should have known members of the public, including Plaintiffs, would foreseeably suffer injury as a result of Eastman's failure to exercise reasonable care.

113. As a direct and proximate result of the aforementioned negligence, Plaintiffs suffered injuries that are permanent and lasting in nature, including physical disability, mental anguish, diminished enjoyment of life, and loss of income, as well as financial expenses for hospitalization and medical care.



**Count II: Negligence Per Se**  
*(On behalf of Plaintiffs Linda Dorsey, Jo Lee Ferguson,  
Kathryn McKinney, and Raegan Muse)*

114. Plaintiffs re-allege paragraphs 1-106 as if fully set forth herein.

115. Pursuant to Tenn. Code Ann. § 68-201-103, Eastman had a duty to maintain the purity of the air resources consistent with protecting health, general welfare, and physical property of the people.

116. Pursuant to Tex. Admin. Code § 101.4, Eastman had a duty not to “discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or adversely affect human health ...” This included a duty not to cause or permit any air pollution in excess of the applicable emission control regulations.

117. Eastman’s principal place of business is in the state of Tennessee and is a resident of the state of Texas and therefore its emissions of an air contaminant is the exact act each state’s statute seeks to prevent.

118. Plaintiffs are within the class of persons whom the statutes seek to protect because at the time of their exposure, they were residents of Texas and were exposed to EtO emitted by a Tennessee company.

119. Plaintiffs’ cancer diagnoses are an injury that the statutes were designed to prevent, by limiting individual’s exposure to pollutants.

120. As a proximate result of the wrongful and tortious acts of Eastman as alleged herein, each Plaintiff’s health was adversely impacted by the devastating effects of cancer and its corresponding treatment.

121. Eastman's wrongful conduct as alleged herein was the proximate cause of Plaintiffs' damages and has caused Plaintiffs to incur damages in an amount to be proven at trial.

**Count III: Loss of Consortium**

*(On behalf of Plaintiffs Doyle Dorsey and Robert David Muse, Jr.)*

122. Plaintiffs re-allege each paragraph as if fully set forth herein.

123. As a proximate result of the wrongful and tortious acts of Eastman, Plaintiffs Doyle Dorsey and Robert David Muse, Jr. have suffered the loss of affection, society, comfort, support, consortium, and companionship of their spouses, Plaintiffs Linda Dorsey and Raegan Muse.

124. Eastman's wrongful conduct as alleged herein was the proximate cause of the damage suffered by Plaintiffs Doyle Dorsey and Robert David Muse, Jr. and has caused them to incur damages in an amount to be proven at trial equal to the loss of affection, society, comfort, support, consortium, and companionship of their spouses.

**PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs, pray for judgment against Defendant as follows:

- a. A judgment awarding Plaintiffs restitution and/or other equitable relief, including, without limitation, restitutionary disgorgement of all profits and unjust enrichment that Defendant obtained from Plaintiffs as a result of the unlawful, unfair and/or fraudulent business practices described herein;
- b. A judgment awarding Plaintiffs damages under common law and/or by statute, and punitive damages;
- c. Compensatory damages for Plaintiffs, according to proof;
- d. General damages for Plaintiffs, according to proof;

- e. Actual loss of earnings for Plaintiffs, according to proof;
- f. Punitive damages in an amount sufficient to punish Defendant and deter future similar wrongdoing;
- g. A judgment awarding Plaintiffs their costs of suit, including reasonable attorneys' fees as permitted by statute or law, and pre- and post-judgment interest; and
- h. Granting such other and further relief as this Court may deem just and proper.

**DEMAND FOR JURY TRIAL**

Plaintiffs hereby demand trial by jury as to all issues.

Dated: May 9, 2025

Respectfully submitted,

By: /s/ Benjamin A. Gastel  
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